

AMENDMENTS

To the Claims:

Claim 1 (withdrawn) A programmable Gamma circuit, comprising:

a controller, receiving a control signal externally, and outputting a plurality of Gamma setup signals according to the control signal, wherein the Gamma setup signals are in digital form and each of the Gamma setup signals comprises a plurality of bit signals; and

a plurality of Gamma units, wherein each of the Gamma units receives one of the Gamma setup signals and outputs a Gamma voltage signal corresponding to the Gamma setup signals.

Claim 2 (withdrawn) The programmable Gamma circuit as recited in claim 1, wherein the control signal is transmitted via I²C interface bus in an integrated circuit.

Claim 3 (canceled)

Claim 4 (withdrawn) The programmable Gamma circuit as recited in claim 1, wherein each of the Gamma units comprises:

a plurality of Gamma resistors, each of the Gamma resistors having a first terminal and a second terminal, the first terminal of any one of the Gamma resistors receives one of the bit signals of the Gamma setup signals correspondingly, the second terminal of each of the Gamma resistors is coupled together where current outputted from each of the Gamma

resistors is summed up to a Gamma current; and

an amplifying unit, receiving the Gamma current and outputting the Gamma voltage signal correspondingly.

Claim 5 (withdrawn) The programmable Gamma circuit as recited in claim 4, wherein the amplifying unit comprises:

a feedback resistor, having a third terminal and a fourth terminal; and

an operational amplifier, having a first input terminal, a second input terminal and an output terminal, wherein the first input terminal is coupled to a voltage level, the second input terminal and the third terminal of the feedback resistor are coupled and receive the Gamma current, and the output terminal and the fourth terminal of the feedback resistor are coupled and output the Gamma voltage signal.

Claim 6 (withdrawn) The programmable Gamma circuit as recited in claim 5, wherein the voltage level is ground voltage level.

Claim 7 (withdrawn) The programmable Gamma circuit as recited in claim 1, wherein the programmable Gamma circuit applies to a driving circuit for a display apparatus.

Claim 8 (withdrawn) The programmable Gamma circuit as recited in claim 7, wherein the display apparatus is a liquid crystal display.

Claims 9-19 (canceled)

Claim 20 (new) A circuit disposed on a glass substrate of a display panel for generating a Gamma voltage signal, comprising:

at least a first Gamma resistor having a first terminal for receiving a first digital signal and a second terminal for outputting a first current;

at least a second Gamma resistor having a first terminal for receiving a second digital signal and a second terminal for outputting a second current;

a feedback resistor having a first terminal coupled to the second terminal of the first Gamma resistor and the second terminal of the second Gamma resistor; and

an operational amplifier having a non-inverting terminal coupled to a reference voltage, an inverting terminal coupled to the first terminal of the feedback resistor for receiving the first and the second currents, and an output terminal coupled to a second terminal of the feedback resistor for outputting the Gamma voltage signal,

wherein the Gamma voltage signal is determined by the first current, the second current and the feedback resistor.

Claim 21 (new) The circuit as recited in claim 20, wherein a resistance value of the first Gamma resistor is equal to a resistance value of the feedback resistor.

Claim 22 (new) The circuit as recited in claim 21, wherein a resistance value of

the second Gamma resistor is a multiple of the resistance value of the first Gamma resistor.

Claim 23 (new) The circuit as recited in claim 22, wherein the Gamma voltage is equal to a sum of the first and the second currents multiplied by the resistance value of the feedback resistor.

Claim 24 (new) The circuit as recited in claim 20, wherein the reference voltage is a ground voltage.

Claim 25 (new) The circuit as recited in claim 20, wherein the circuit is applied to a driving circuit for driving the display panel.

Claim 26 (new) The circuit as recited in claim 25, wherein the display panel is a liquid crystal display (LCD) panel.

Claim 27 (new) A display apparatus, comprising:

a display panel;

a control/modify circuit, for providing at least a first digital signal and a second digital signal; and

a driving circuit, disposed on a glass substrate of the display panel and coupled to the display panel and the control/modify circuit, for driving the display panel, the driving

circuit comprising at least a circuit for generating a Gamma voltage signal, the circuit comprising:

- at least a first Gamma resistor having a first terminal for receiving the first digital signal and a second terminal for outputting a first current;

- at least a second Gamma resistor having a first terminal for receiving the second digital signal and a second terminal for outputting a second current;

- a feedback resistor having a first terminal coupled to the second terminal of the first Gamma resistor and the second terminal of the second Gamma resistor; and

- an operational amplifier having a non-inverting terminal coupled to a reference voltage, an inverting terminal coupled to the first terminal of the feedback resistor for receiving the first and the second currents, and an output terminal coupled to a second terminal of the feedback resistor for outputting the Gamma voltage signal,

wherein the Gamma voltage signal is determined by the first current, the second current and the feedback resistor.

Claim 28 (new) The display apparatus as recited in claim 27, wherein a resistance value of the first Gamma resistor is equal to a resistance value of the feedback resistor.

Claim 29 (new) The display apparatus as recited in claim 28, wherein a resistance value of the second Gamma resistor is a multiple of the resistance value of the first Gamma resistor.

Claim 30 (new) The display apparatus as recited in claim 29, wherein the Gamma voltage is equal to a sum of the first and the second currents multiplied by the resistance value of the feedback resistor.

Claim 31 (new) The display apparatus as recited in claim 27, wherein the reference voltage is a ground voltage.

Claim 32 (new) The display apparatus as recited in claim 27, wherein the display panel is a liquid crystal display (LCD) panel.